# Before the RECEIVED

# FEDERAL COMMUNICATIONS COMMISSION Washington, D.C. 20554

SEP 24 2001

In the Matter of	)	FEDERAL COMMUNICATIONS COMMISSION
Petition of WorldCom, Inc. Pursuant	)	OFFICE OF THE SECRETARY
To Section 252 (e)(5) of the	)	
Communications Act for Expedited	)	
Preemption of the Jurisdiction of the	)	CC Docket No. 00-218
Virginia State Corporation Commission	)	
Regarding Interconnection Disputes	)	
With Verizon Virginia, Inc., and for	)	
Expedited Arbitration	)	
-	)	
In the Matter of	)	
Petition of Cox Virginia Telecom, Inc.	)	
Pursuant to Section 252 (e)(5) of the	)	
Communications Act for Preemption	)	CC Docket No. 00-249
Of the Jurisdiction of the Virginia State	)	
Corporation Commission Regarding	)	
Interconnection Disputes with Verizon	)	
Virginia, Inc. and for Arbitration	)	
In the Matter of	)	
Petition of AT&T Communications	)	
Virginia Inc., Pursuant to Section 252 (e)(5)	)	CC Docket No. 00-251
of the Communications Act for Preemption	)	
of the Jurisdiction of the Virginia	)	
Corporate Commission Regarding	)	
Interconnection Disputes with Verizon	)	
Virginia, Inc.	)	

# SURREBUTTAL TESTIMONY OF RICHARD B. LEE ON BEHALF OF AT&T¹ AND WORLDCOM, INC.

## **September 21, 2001**

The AT&T entities sponsoring this Surrebuttal Testimony are AT&T Communications of Virginia, Inc., TCG Virginia, Inc., ACC National Telecom Corp., MediaOne of Virginia and MediaOne Telecommunications of Virginia, Inc. (together, "AT&T").

# Surrebuttal Testimony of Richard B. Lee

## **Table of Contents**

I.	INTRODUCTION	1
II.	IT WOULD BE UNREASONABLE TO USE THE LIVES PROPOSED BY MR. SOVEREIGN IN THIS PROCEEDING	2
III.	THE LIVES PRESCRIBED BY THE FCC FOR VERIZON IN OTHER STATES ARE NOT RELEVANT TO THIS PROCEEDING	3
IV.	MOST STATES HAVE ADOPTED FCC PRESCRIBED LIVES, OR SIMILAR STATE PRESCRIBED LIVES, IN UNE PROCEEDINGS	3
V.	DR LACEY'S RESERVE ANALYSIS IS NOT PERSUASIVE	4
VI.	FCC PRESCRIBED LIVES RESULT IN ECONOMIC DEPRECIATION	11
VII.	CONCLUSION	11

1		I. INTRODUCTION
2		
3	Q.	PLEASE STATE YOUR NAME, POSITION AND BUSINESS ADDRESS.
4	A.	My name is Richard B. Lee. I am Vice President of the economic consulting firm of
5		Snavely King Majoros O'Connor & Lee, Inc. ("Snavely King"). My business address is
6		1220 L Street, N.W., Suite 410, Washington, D.C. 20005.
7	Q.	ARE YOU THE SAME RICHARD B. LEE WHO SUBMITTED DIRECT
8		TESTIMONY IN THIS PROCEEDING ON JULY 31, 2001, AND REBUTTAL
9		TESTIMONY ON AUGUST 27, 2001?
10	A.	Yes, I am.
11	Q.	DID YOUR DIRECT TESTIMONY CONTAIN A DESCRIPTION OF YOUR
12		BACKGROUND AND EXPERIENCE?
13	A.	Yes, it did.
14	Q.	WHAT IS THE PURPOSE OF YOUR TESTIMONY?
15	A.	In this surrebuttal testimony, I will respond to the rebuttal testimonies of Verizon-
16		Virginia ("VZ-VA") witnesses Allen E. Sovereign ("Sovereign Rebuttal"), Dr. John
17		Lacey ("Lacey Rebuttal") and Jerry A. Hausman ("Hausman Rebuttal") on the subject of
18		the depreciation parameters appropriate for use in Total Element Long-Run Incremental
19		Cost ("TELRIC") calculations.
20	Q.	WHAT DO YOU CONCLUDE?
21	A.	I conclude that the rebuttal testimonies of Mr. Sovereign and Drs. Lacey and Hausman
22		are not persuasive. The projection lives last prescribed by the Federal Communications

1		Commissio	on ("FCC") fo	or VZ-V	'A should be used	d in d	evelopin	g unbundl	ed network
2		element ("UNE") rates.							
3 4 5 6 7					SONABLE TO U N THIS PROCEI			ES PROPO	<b>DSED</b>
8	Q.	PLEASE	EXPLAIN	THE	RELEVANCE	OF	THE	FCC'S	RECENT
9		DEPRECI	ATION STA	<b>TEMEN</b>	TS TO THIS PR	OCEE	DING.		
10	A.	Mr. Sovere	eign relied on	FCC st	atements in its SI	3C 27	Order	and in a	recent court
11		document	for the proposi	tion tha	t the states need no	ot use	the FCC	's prescrib	ed lives for
12		the pricing	g of UNEs. <sup>2</sup>	In tl	he cited statemen	nts, ho	wever,	the FCC	is merely
13		acknowledging that other lives are not <u>necessarily</u> unreasonable. The FCC stated:							
14 15 16 17 18 19 20			economic. to follow t set for reg Kansas and	While he depreulation of other s	at the depreciation it would be reason eciation rates the Cof SWBT's interstates have done, of unreasonable. <sup>3</sup>	able for commisate ser	or a state sion has vices, as		
21	The quoted passage, and the cited statements generally, are certainly not a license to adopt						dopt		
22	depreciation rates or lives regardless of their economic reasonableness. Consistent with these								
23	directives, it would reasonable to adopt the FCC's depreciation prescription for VZ-VA. As I								
24	explained in my rebuttal testimony, however, the lives proposed by Mr. Sovereign are								

Sovereign Rebuttal, at 3-4, citing Joint Application by SBC Communications Inc., Southwestern Bell Telephone Company, and Southwestern Bell Communications Services, Inc. d/b/a Southwestern Bell Long Distance for Provision of In-Region, InterLATA Services in Kansas and Oklahoma, CC Docket No. 00-217, Memorandum Opinion and Order FCC 01-29, released January 22, 2001 ("SBC 271 Order"), and Reply Brief for Petitioners United States and the FCC, Verizon Communications, Inc. et al. v. FCC et al. (Nos. 00-551, 00-555, 00-587, 00-590, and 00-602).

SBC 271 Order, ¶ 76 (footnotes deleted).

1	significantly shorter than those prescribed by the FCC. And as I explained there and in what						
2	follow	follows, Mr. Sovereign's reasons for proposing these shorter lives are entirely without merit. It					
3	follow	vs, therefore, that it would <u>not</u> be reasonable to adopt Mr. Sovereign's proposal in this					
4	procee	eding.					
5 6 7 8 9		III. THE LIVES PRESCRIBED BT THE FCC FOR VERIZON IN OTHER STATES ARE NOT RELEVANT					
10	Q.	ARE THE LIVES PRESCRIBED BY THE FCC FOR VERIZON IN OTHER					
11		STATES RELEVANT TO THIS PROCEEDING?					
12	A.	No. Mr. Sovereign states that the FCC "prescribed the shortest lives in the Commission's					
13		ranges for affiliates of Verizon VA in Washington, Oregon, Idaho and Hawaii" last year. <sup>5</sup>					
14		In fact, the FCC did not prescribe the bottom of its digital switching range for any of					
15		these states. <sup>6</sup>					
16	In any case, Verizon has chosen not to file for new FCC prescriptions for						
17	Virginia. <sup>7</sup> The Commission should not speculate on what it might have done had VZ-VA						
18	exercised its right to seek FCC represcription. To adopt shorter lives in this proceeding						
19	would be to effectively "reward" VZ-VA for its failure to seek FCC represcription.						
20 21 22	IV. MOST STATES HAVE ADOPTED FCC PRESCRIBED LIVES, OR SIMILAR STATE PRESCRIBED LIVES, IN UNE PROCEEDINGS						

Lee Rebuttal, at 1-2.

Sovereign Rebuttal, at 8.

The digital switching lives prescribed were: Washington, 13.5; Oregon 13.0; Idaho 13.5; and Hawaii 14.0.

The former GTE filed for Virginia represcription in 1999.

#### 1 Q. HAVE MANY STATES CHOSEN TO USE LIVES SIGNIFICANTLY SHORTER

#### 2 THAN THOSE PRESCRIBED BY THE FCC IN UNE PRICING PROCEEDINGS?

- 3 A. No. Mr. Sovereign refers to four states as adopting lives shorter than the FCC's
- 4 prescribed ranges.<sup>8</sup> In my Direct Testimony, I noted 20 states, in addition to Virginia,
- 5 that chose FCC prescribed lives, or similar state prescribed lives.

6

7

8

17

#### V. DR. LACEY'S RESERVE ANALYSIS IS NOT PERSUASIVE

9

#### Q. DO YOU FIND DR. LACEY'S RESERVE ANALYSIS PERSUASIVE?

10 A. No. In my direct testimony I explained that the FCC and I believe that the depreciation reserve is an extremely important indicator of the depreciation process. <sup>10</sup> I stated that the growth of depreciation reserve percents since 1980 indicates that the depreciation process is resulting in adequate depreciation accruals, and that the FCC's projection life estimates have been forward-looking and unbiased. <sup>11</sup> Dr. Lacey contends that the reserve is increasing simply because VZ-VA has been changing its mix of assets and the age of assets has increased (relative to their projected lives). <sup>12</sup>

#### Q. DO YOU AGREE WITH DR. LACEY'S ANALYSIS?

18 A. No, Dr. Lacey is confusing what the depreciation reserve should be (the "theoretical"
19 reserve) with what the reserve actually is (the "book" reserve). His simplistic numeric
20 examples are based upon individual asset accounting, not group accounting, and thus

<sup>8</sup> Sovereign Rebuttal, at 11-13.

Lee Direct at 9-13.

<sup>10</sup> *Id.*, at 6-9.

<sup>11</sup> *Id.*, at 8-9.

Lacey Rebuttal, at 1.

have little bearing on the issue at hand. The three "flaws" he contends "destroy" my analysis are illusory.

#### 3 Q. WHAT IS DR. LACEY'S FIRST CONTENTION?

4 A. Dr. Lacey states:

First, Mr. Lee ignores that as the age of the assets increases, both the amount of depreciation reserve and the percentage of depreciation reserve increases.<sup>13</sup>

7 8 9

10

11

12

13

14

15

5

6

This statement is obviously incorrect. It is true that as the age of assets increase, the amount of depreciation reserve should increase. In other words, the "theoretical" reserve increases. But whether or not the "book" reserve increases, decreases or remains the same is totally dependent upon the depreciation accruals made each year. In turn, these depreciation accruals are primarily dependent upon the projection life selected for the account in question. Forward-looking projection lives ensure that a company's book reserves will keep pace with changes in its theoretical reserve.

# 16 Q. HAS THE AVERAGE AGE OF VZ-VA'S ASSETS INCREASED RELATIVE TO 17 THEIR EXPECTED LIFE IN RECENT YEARS?

18 A. Yes. According to annual filings made by VZ-VA with the FCC, its composite 19 theoretical reserve has risen by 4.8% since 1997. More importantly, VZ-VA's actual 20 book reserve has increased by 6.5% during the same period, as the following table shows:

21	DATE	THEORETICAL	BOOK
22	1/1/97	40.1%	44.3%
23	1/1/98	42.9%	46.0%
24	1/1/99	43.4%	47.4%
25	1/1/00	44.5%	49.4%
26	1/1/01	44.9%	50.8%

<sup>13</sup> *Id.*, at 3.

As shown on Attachment 1 to this surrebuttal testimony, the projection lives prescribed by the FCC for VA-VZ have resulted in a reserve surplus (i.e. – book minus theoretical) of over \$400 million as of January 1, 2001.

#### Q. WHAT IS DR. LACEY'S SECOND CONTENTION?

Dr. Lacey also contends that the depreciation reserve increases as the asset mix changes. <sup>14</sup> Once again, he confuses the theoretical reserve with the book reserve. It is true that the composite theoretical reserve may increase as the asset mix changes (it may also stay the same or decrease). For example, assume the company has two asset accounts in Year 1 as follows:

10			THEORETICAL	
11	ACCOUNT	PLANT	RESERVE	PERCENT
12				
13	A	1000	400	40.0%
14	В	1000	<u>400</u>	<u>40.0</u> %
15				
16	Composite	2000	800	40.0%

Next assume that four years later the account reserves appear as follows:

ACCOUNT PLANT		THEORETICAL RESERVE	PERCENT	
A B	1000 <u>800</u>	400 400	40.0% 50.0%	
Composite	1800	800	44.4%	

In this example, the theoretical reserve of Account A has remained stable, while the theoretical reserve of Account B has risen. In other words, the age of Account B is greater relative to its expected life. Note that, contrary to Dr. Lacey's contention, whether the expected life of Account B is greater or less that the expected life of Account

A.

*Id*, at 5-6.

A is irrelevant. What matters is the average age of the plant in each account <u>relative</u> to its expected life.

To some degree, the mix of plant may have contributed to the increase in theoretical reserve experienced by VZ-VA as discussed above. Once again, however, the increase in VZ-VA's <u>book</u> reserve is attributable to accruals booked each year pursuant to the FCC's forward-looking projection life prescriptions. The mix of accounts has not been a significant factor, since the book reserves of all the major accounts have increased as shown in Attachment 2 to this surrebuttal testimony. The book reserve increases are dramatic, especially considering the growth that each account has experienced, as shown in the following table:

11			BOOK R	ESERVE
12	ACCOUNT	GROWTH	1992	2000
13				
14	Digital Switch	156%	25.1%	44.1%
15	Digital Circuit	117%	36.9%	58.2%
16	Aerial Cable	44%	40.8%	59.4%
17	Underground Cable	22%	27.4%	53.1%
18	Buried Cable	53%	38.4%	55.1%

#### Q. WHAT IS DR. LACEY'S THIRD CONTENTION?

Dr. Lacey contends that my analysis is somehow flawed because VZ-VA's book reserve has increased during a period in which the FCC did not decrease its life prescriptions for VZ-VA. To the contrary, there has not been a need to reduce VZ-VA's prescribed lives because the FCC prescribed <u>forward-looking</u> lives in 1994. The growth in VZ-VA's book reserve from 36.5 percent in 1993 to about 50 percent today, and the reserve surplus which has accumulated, are the direct result of the FCC's life prescriptions.

A.

*Id.*, at 3-4.

1	Q.	SINCE DR. LACEY'S ILLUSTRATIONS RELATE ONLY TO THE REASONS					
2		FOR CHANGES IN THE THEORETICAL RESERVE, CAN YOU PROVIDE AN					
3		EXPLANATION OF WHY THE BOOK RESERVES OF VZ-VA HAVE					
4		INCREASED SO DRAMATICALLY?					
5	A.	Certainly. Attachment 3 to this testimony illustrates the forces affecting the book					
6		reserves of VZ-VA and other incumbent local exchange carriers ("ILECs") in recent					
7		years. The data on Attachment 3 can be viewed as either for a specific account, or for the					
8		composite of all accounts in a company. In either case, the data assume that the					
9		economic life of the account, or of all accounts, is 10 years, given a perfect vision of the					
10		future.					
11		The First Set of calculations illustrate a steady state situation in which additions,					
12		retirements and depreciation rates are all 10%. Under this assumption, the theoretical and					
13		book reserve remain constant at 40%.					
14		The Second Set of calculations assumes that additions are greater than retirements					
15		and plant in service is growing over time. As I described in my direct testimony, if this is					
16		the only change to the base assumption, both the theoretical and book reserve will					
17		decrease. 16 In this case, the reserve percent decreases from 40% at the beginning of Year					
18		1 to 32.8% at the end of year 4. This book reserve would still exactly equal the					
19		theoretical reserve, however, since accruals are still based upon the economic life of 10					
20		years.					
21		The Third Set of calculations assumes that prescribed lives are incorrectly					
22		estimated at 12.5 years, resulting in a depreciation rate of only 8%. The use of overly					

Lee Direct, at 6. The high rate of additions is causing the average age of plant to decrease.

long lives accelerates the decrease in the book reserve to a level of only 25.8% at the end of year 4. This would be lower than the theoretical reserve (as calculated in Set 2) of 32.9%. In the example, a reserve <u>deficiency</u> of 86 units has resulted from the prescription of lives that were too long.<sup>17</sup>

The Fourth Set of calculations illustrates the real increases in VZ-VA reserves. In this calculation we assume that retirements are only 5%, instead of 10% as implied by an economic life of 10 years. As a result, the reserve percent continues to increase <u>despite</u> the growth in plant of 46 percent. Instead of a reserve deficiency, a reserve <u>surplus</u> of 232 units has been created.<sup>18</sup>

As I noted in my direct testimony, this growing reserve and reserve surplus might be a sign that accrual rates are too high and prescribed lives are too short. In this illustration, of course, there is no cause for concern since we know the accrual is based upon the true economic life of 10 years. We can expect retirements to increase in the future and the reserve surplus to decrease as they do. In the end, the use of the forward-looking life of 10 years will result in capital recovery of these investment over their average economic life.

In real life, the future is not as clear. We know that the VZ-VA book reserve has been growing despite a 60 percent growth of plant since 1992. In recommending the lives prescribed by the FCC in 1994, I am assuming that retirements will increase in the

The theoretical reserve is 400 (Column h, Set 2, Year 4), while the book reserve is only 314 (Column h, Set 3, Year 4).

The theoretical reserve remains 400 (Column h, Set 3, Year 4), while the book reserve has grown to 632 (Column h, Set 4, Year 4).

Lee Direct, at 7.

- future, and that the FCC's lives are not unrealistically short. Although this remains to be seen, it is obvious that the FCC's life prescriptions are not unrealistically long.
- 3 Q. PLEASE COMMENT ON DR. LACEY'S CALCULATONS SHOWING THAT
- 4 VZ-VA'S RESERVE WOULD BE HIGHER IF SHORTER LIVES HAD BEEN
- 5 PRESCRIBED BY THE FCC IN 1994.<sup>20</sup>
- 6 A. Using Dr. Lacey's percentages, the VZ-VA reserve surplus would now be \$786 million
- 7 had the FCC prescribed the bottom of its range and \$1.6 billion had VZ-VA's GAAP life
- 8 proposals been prescribed.<sup>21</sup> As discussed above, a relatively small surplus is not terribly
- 9 significant if retirements can be expected to grow in the future. But the surpluses implied
- by Dr. Lacey's percentages clearly indicate that shorter lives should not have been
- prescribed in 1994. Indeed, the lives actually prescribed by the FCC may actually be too
- short. They are certainly not too long.
- 13 Q. PLEASE COMMENT ON DR. LACEY'S REFERENCE TO AT&T'S
- 14 DEPRECIATION RESERVE LEVELS.<sup>22</sup>
- 15 A. The data referred to by Dr. Lacey relates to AT&T's long distance operations. Such data
- are not at all relevant to the determination of local exchange depreciation lives. As the
- FCC stated long ago, "the underlying considerations that go into estimating the basic
- factors [i.e., lives and salvage] are sufficiently different for the two groups [i.e., local
- and long distance] that they should be considered separately."<sup>23</sup>

20

Lacey Rebuttal, at 8.

FCC Low = 56% x \$7,088,747,070 - \$3,183,520,774; GAAP = 67% x 7,088,747,070 - 3,183,520,774.

Lacey Rebuttal, at 9.

Simplification of the Depreciation Prescription Process, CC Docket No. 92-296, Notice of Proposed Rulemaking, FCC 92-537, rel. December 29, 1992, ¶ 15.

1 2 3 4	Q.	VI. FCC PRESCRIBED LIVES RESULT IN ECONOMIC DEPRECIATION  DO YOU AGREE WITH DR. HAUSMAN'S CONTENTION THAT THE
5		AT&T/WORLDCOM MODEL TAKES ACCOUNT OF "REGULATORY
6		DEPRECIATION," BUT NOT ECONOMIC DEPRECIATION CAUSED BY THE
7		CHANGE IN THE PRICE OF CAPITAL GOODS USED IN
8		TELECOMMUNICATIONS. <sup>24</sup>
9	A.	No. The projection lives prescribed by the FCC and used in the AT&T/WorldCom
10		model are "economic" lives, since they represent the most reasonable estimate of the total
11		revenue producing life of newly placed plant. <sup>25</sup> As such, they take into account expected
12		changes in the price of capital goods to the extent that these changes can be expected to
13		affect the economic life of the assets in question. The use of FCC prescribed projection
14		lives in the AT&T/WorldCom model thus results in economic depreciation.
15		
16		VII. CONCLUSION
17		
18	Q.	HAVE YOU BEEN PERSUADED TO CHANGE YOUR TESTIMONY BY THE
19		REBUTTAL TESTIMONIES OF MR. SOVEREIGN, DR. LACEY OR DR.
20		HAUSMAN?
21	A.	No. I continue to recommend that the lives last prescribed by the FCC for VZ-VA be
22		used in this proceeding.
23		

Hausman Rebuttal, at 14. Verizon witness Howard Shelanski makes essentially the same argument (Shelanski Rebuttal, at 7-9). My response in the text applies to his testimony as well.

1	Ο.	DOES THIS	CONCLUDE YOUR SURREBU	TTAL	. TESTIMONY?
---	----	-----------	-----------------------	------	--------------

2 A. Yes, it does.

See Lee Direct, at 3-8.

I. Richard B. LEE hereby swear and affirm that the foregoing surrebuttal testimony was prepared by me or under my direct supervision or control and is true and accurate to the best of my knowledge and belief.

Signed:

05/31/01 10:53 AM XMEF: 03

PRES: 2000,EF,02 PROP: 2001,EF,02 COMPANT: VERIZON - VIRGINIA STATE: VIRGINIA EAST ACCOUNT: STATEMENT C - RESERVES

PAGE 1 OF 1

# ANNEAL FILING ONLY CALCULATION OF RESERVES 1-1-2001

			BCCK RES	ĒRVE	ADJUSTE BOOK RESE CITANORA HTIE	RVE		THEORET! RESERV	
		1-1-2001	**********			•••••	UNAMORTIZED	************	*******
ACCCLINT	CATEGORY	INVESTMENT	AMCLINT	PERCENT	AMCLINT	PERCENT	BALANCE	AMOUNT	PERCENT
******	v	AS.	92	C=8/A	D\$	E=0/A	F\$=0+6	<b>63</b>	H=G/A
2112	MOTOR VEHICLES	79,172,091	54,191,280	68.4	54,191,250	68.4	d	40,415,283	51.3
2114	TOOLS AND OTHER WORK	56,789,926	29,410,796	51.5	29,410,796	51.4	a	24,873,988	43.8
2721	BUILDINGS	436,929,350	91,306,644	20.9	91,306,544	20.7	0	80,395,000	18.4
2122	FURNITURE	286,025	-163,714	-57.2	-163,714	-57.2	0	•	
2123	OFFICE EQUIPMENT				•				
	OFFICE SUPPORT EQPT	4,324,051	1,671,422	38.7	1,571,422	38.7	. 0	1,902,582	44.0
	COMPANY COMM EGPT	2,293,203	-2,710,655	-118.2	-2,710,555	-118.2	a	-61,916	•2.7
2124	COMPUTERS	171,330,729	98,466,399	57.3	98,466,399	57.3	0	99,146,331	57.7
2211	ANALOG SWITCHING	37,928,070	37,535,105	99.3	37.535,105	99.3	a	33,542,198	88.7
2212	DIGITAL SWITCHING	1,374,469,170	598,301,473	43.5	598,301,473	43.5	Œ	518,174,877	37.7
2220	OPERATOR SYSTEMS	16,917,353	6,059,522	35.8	4,059,522	5. čč	Œ	6,022,578	35.6
2231	RADIO STSTEHS	3,576, <i>3</i> 31	1,796,328	50.3	1,798,328	50.3	8	2,300,257	78.3
2232	CIRCUIT EQUIPHENT							• •	
	DIGITAL CIRCUIT	1,969,332,546	1,117,718,857	56.7	1,117,718,357	56.7	0	915,972,180	46.5
	ANALOG CIRCUIT	63,864,184	66,503,250	104.1	66,503,250	104.1	a		88.5
<b>Z36</b> 2	OTHER TERMINAL EGPT	111,923,174	30,214,910	27.0	30,214,910	27.0	a	25,630,407	22.9
2411	POLES	85,048,031	57,411,325	47.5	57,411,325	67.5	0	58,342,949	<b>68.</b> 6
2421	AERIAL CABLE				•			•	
	ABRIAL CABLE - MET	445,004,617	280,951,564	63.1	280,951,564	63.1	3	259,382,596	58.4
	AERIAL CABLE-NON MET	65,968,572	34,562,212	40.3	34,562,212	40.3	Q	31,894,377	37.1
2422	UNDERGROUND CABLE								
	U.G. CA - MET	273,163,582	160,077,338	58.2	160,077,338	58.2	a	135,930,910	49.4
	U.G. CA - NON MET	164,354,095	73,272,350	44.5	73,272,350	44.6	0	69,193,074	42.1
2423	BURIED CABLE	, ,	• •		-,,				
	BURIED CABLE-MET	1,224,410,096	693,745,379	56.7	693,745,379	56.7	Q	648,937,351	53.0
	BURIED CABLE-NON MET	84,037,757	26,759,000	31.8	26,759,000	31.5	õ	25,211,327	30.0
2424	SUBMARINE CABLE	696,316	260,435	37.4	260,435	37.4	a	214,465	30.3
2426	INTRABLIG CABLE	2.212.2	,	•	200,400	27.15	_	5,	
	INTRABLOG - HET	23,527,377	23,520,797	100.0	23,320,797	100.3	0	15,386,905	65.4
	INTRABLOG - NON MET	4,459,275	1,155,408	25.9	1,155,508	25.9	o	1,052,389	23.5
2441	CONOUIT SYSTEMS	365,940,949	118,800,699	32.5	118,300,499	32.5	0	131,738,742	36.3
	COMO 01 1/3/2/2	2027.407.42			110,000,077	46.3	•	131,130,146	34.5
	TOTALS	7,088,747,070	3,600,920,324	50.4	3,400,920,324	50.3	Q	3,183,520,774	44.9
2321	CUST PREH WIRE	0	0	0.0	0	0.0	0	0	0.0
	GRAND TOTALS	7,088,747,070	3,600,920,324	50.8 3	1,600,920,324	50.5	0	3,183,520,774	44.9

05/31/01 10:53 AM XMEF: 03 PRES: 2000,EF,02

PROP: 2001, 2F,02

COMPANT: VERIZON - VIREINIA STATE: VIREINIA EAST ACCULATI: STATEMENT C - RESERVES PAGE 1 OF 1

# ANNUAL FILING ONLY CALCULATION OF RESERVES 1-1-2001

		•12001	BOOK RES	ERVE	ADJUSTE SOOK RESE UITH AMORTI	RVE ZATION		THEORETICAL RESERVE		
ACCOUNT	CATEGORY	1-1-2001 INVESTMENT	AMCLINT	PERCENT	AMCLINT	PERCENT	UNAHORTIZED BALANCE	AMOUNT	PERCENT	
		A <b>S</b>	92	C=8/A	DS	E=0/A	F\$#Q-8	<b>63</b>	H=G/A	
2112	HOTOR VEHICLES	79,172,291	54, 191, 250	68.4	54,191,280	68.4	a	40,415,283	51.3	
2114	TOOLS AND OTHER WORK	56,789,926	29,410,796	51.3	29,410,796	51.3	a	24,873,988	43.8	
2121	BUILDINGS	436,929,350	91,306,644	20.9	91,306,644	20.9	Œ	50,395,000	18.4	
2122	FURNITURE	286,025	-163,714	-57.2	-163,714	-57.2	G	102,111	35.7	
2123	OFFICE EQUIPMENT									
	OFFICE SUPPORT EOPT	4,324,051	1,671,422	38.7	1,571,422	38.7		1,902,582	44.0	
	CCMPANY COMM EGPT	2,293,203	-2,710,655	-118.2	-2,710,455	-118.2	0	-61,916	•2.7	
2124	COMPUTERS	171,830,729	98,466,399	57.3	98,466,399	57.3	3	99,146,331	57.7	
2211	ANALOG SWITCHING	37,928,070	37,535,105	99.3	37.535,105	99.3	a	33,542,198	88.7	
2212	DIGITAL SWITCHING	1,374,469,170	598,301,473	43.5	598,301,473	43.5	a	518,174,877	37.7	
2220	OPERATOR SYSTEMS	16,917,353	4,059,522	35.4	6,059,522	35.3	G	6,022,578	35.6	
2231	RADIO STSTEMS	3,576,331		50.3	1,796,325	50.3	0	2,800,267		
2232	CIRCUIT EQUIPMENT	.,,	,,		,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		_	-,,		
	DIGITAL CIRCUIT	1.969.332.546	1,117,718,857	56.7	1,117,718,857	56.7	a	915,972,180	46.5	
	ANALOG CIRCUIT	63,864,184		104.1	66,503,250	104.1	ā	\$6,319,803	88.5	
<b>Z3</b> 62	OTHER TERMINAL EOPT	111,923,174		27.0	30,214,910	27.0	ā	25,630,407	22.7	
2411	PCLES	85,048,031	57,411,325	47.5	57,411,325	67.5	ō	58,342,949	68.6	
2421	AERIAL CABLE				21,7411,722		_	20,0 12,1 1		
5751	AERIAL CABLE - MET	445,004,517	280.951.564	63.1	280.951.564	63.1	a	259,382,596	58.÷	
	AERIAL CABLE-NON MET	85,968,572	• •	40.3	34,662,212	40.3	a	31,894,377		
2422	UNDERGROUND CABLE	22,540,512	3-1001010	****	34,002,212		•	21,021,211		
2422	U.G. CA - MET	275,163,582	160,077,338	58.2	160,077,338	58.2	a	135,930,910	49.4	
		164,354,095	73,272,350	30.2 44.5		44.6	9	69,193,074	42.1	
	U.G. CA - NON MET	104,224,033	13,212,330	44.3	73,272,350	44.0	•	02,173,014	76.1	
2423	BURIED CABLE		(67 3/5 750				•	//# 077 761	53.0	
	BURIED CABLE-MET	1,224,410,096	693,745,379	56.7	693,745,379	56.7	á	648,937,351		
	BURIED CABLE-NON MET	84,037,757	26,759,000	31.4	26,759,000	31.3	0	25,211,327		
2424	SUBMARINE CABLE	696,316	260,435	37.4	260,435	37.4	α	214,465	30.5	
2426	INTRABLOG CABLE						_			
	INTRABLOG - MET	23,527,377	23,520,797	100.0	23,520,797	100.3	0	15,386,905	65.4	
	INTRABLOG - NON MET	4,439,275	1,155,408	25.9	1,155,508	25.9	0	1,052,389	23.6	
2441	CONOUIT SYSTEMS	365,940,949	118,800,599	32.5	118,300,599	32.5	0	131,738,742	36.3	
	TOTALS	7,088,747,070	3,400,920,324	50.4	3,600,920,324	50.3	a	3,183,520,774	44.9	
2321	CUST PREM WIRE	0	0	0.0	0	0.0	0	0	0.0	
	GRAND TOTALS	7,088,747,070	3,600,920,324	50.3	3,600,920,324	50.5	s :	3,183,520,774	44.9	

05/31/01 10:53 AH XMF: 03 PRES: 2000, EF, 02 PROP: 2001.EF.02

GRAND TOTALS

7,088,747,070 3,600,920,324

COMANT: VERIZON - VEREZNIA STATE: VIRGINIA EAST ACCULINT: STATEMENT C - RESERVES PAGE 1 OF 1

#### ANNUAL FILING ONLY CALCULATION OF RESERVES 1-1-2001

ADJUSTED ROOK RESERVE THEORETICAL BOOK SPREEVE WITH AMORTIZATION RESERVE 1-1-2001 AMOUNT PERCENT AMOUNT PERCENT BALANCE INVESTMENT AMOUNT PERCENT ACCOUNT CATEGORY C=8/A DS E=Q/A FS=0-8 GS HmG/A 79,172,091 54,191,280 68.4 54,191,280 68.4 0 40,415,283 51.3 HOTOR VEHICLES 2112 TCOLS AND OTHER WORK 56,789,926 29,410,796 51.8 29,410,796 51.8 0 24,873,988 43.8 2114 436,929,350 91,306,644 20.9 91,306,644 20.9 0 80,395,000 18.4 2121 RUITOTAGS 286,025 -163,714 -57.2 -163,714 -57.2 Œ 102.111 35.7 2122 FIRMITURE OFFICE EQUIPMENT 2123 1,571,422 38.7 1,571,422 38.7 0 1,902,582 OFFICE SUPPORT EQPT 4,324,051 44.0 2,293,203 -2,710,455 -118.2 -2,710,455 -118.2 g -61,916 -2.7 CCMPANY COMM ECPT 98,466,399 17.3 98,466,399 57.3 0 99,146,331 57.7 171,830,729 2124 COMPUTERS 99.0 37.535,105 99.0 37,928,070 37, 535, 105 0 33,542,198 88.7 2211 ANALOG SWITCHING 1,374,469,170 598,301,473 43.5 598,301,473 43.5 0 518,174,877 37.7 2212 DIGITAL SWITCHING 6,059,522 35.8 35.6 6,059,522 35.9 6,022,578 16,917,333 2220 OPERATOR SYSTEMS 1,798,328 50.3 1,798,328 50.3 2,800,257 a 78.3 3,576,331 2231 RADIO SYSTEMS 2232 CIRCUIT EQUIPMENT DIGITAL CIRCUIT 1,969,832,646 1,117,718,857 56.7 1,117,718,357 56.7 0 915,972,180 46.5 63,864,184 66,503,250 104.1 66,503,250 104.1 0 56.519,803 88.5 ANALOG CIRCUIT a 30,214,910 111,923,174 27.0 30,214,910 27.0 25,430,407 22.9 OTHER TERMINAL EGPT **Z3**62 0 58,342,949 68.6 85,048,031 57,411,325 67.5 57,411,325 67.5 2411 2421 AERIAL CABLE 58.4 0 259, 382, 596 63.1 ABRIAL CABLE - MET 445,004,617 280,951,564 63.1 280,951,564 40.3 34,562,212 40.3 0 31,894,377 37.1 AERIAL CABLE-NON MET 85,968,572 34,562,212 2422 UNDERGROUND CABLE 0 135,930,810 49.4 275,163,582 160,077,338 58.2 160,077,338 58.2 U.G. CA - MET U.G. CA - NON MET 164,354,095 73,272,350 42.1 73,272,350 44.6 0 69, 193, 074 44.5 2423 BURIED CABLE Q 648,937,351 53.3 BURIED CABLE-MET 1,224,410,096 693,745,379 56.7 693,745,379 56.7 25,211,327 30.0 84.037.757 26,759,000 31.5 SURIED CASLE-NON MET 31.8 26,759,000 30.3 a 214,465 696,316 260,435 37.4 260,435 37.4 2424 SUBMARINE CABLE 2426 INTRABLOG CABLE 0 15,386,905 65.4 23,520,797 100.0 100.3 23,527,377 23,320,797 INTRABLOG - MET 25.9 1,155,508 25.9 1.052.389 23.6 INTRABLOG - NON MET 4,459,275 1,155,408 0 131,738,742 36.3 365,943,949 118,800,599 32.5 118,300,599 32.5 2441 CONOUIT SYSTEMS 44.9 0 3,183,520,774 7.088.747,070 3,400,920,324 50.8 3,400,920,324 50.8 TOTALS ٥ 0.0 0.0 2321 CUST PREM WIRE 0 0 0.0 44.9 0 3,183,520,774

50.5 3,600,920,324

50.5

## Verizon - Virginia Digital Switch Rates

(Dollars in Millions)

_		mmunicatio	ns Plant in Se	rvice				EOY	AVG.	Add	Retire	Deprec	Reserve
	BOY	EOY	Average	Increase	<u>Add</u>	Ret	Deprec	Reserve	Reserve	Rate	Rate	Rate	Percent
	(a)	(b)	(c)=(a+b)/2	(d) = b-a	(e)	(f)	(g)	(h)	(i)	(j) = e/a	(k) = f/a	(I) = g/c	(m) = h/b
1992	557	643	600	87	87	8	40	161	143	15.7	1.5	6.7	25.1
1993	643	711	677	68	75	15	50	200	181	11.6	2.4	7.4	28.2
1994	711	778	744	67	72	7	54	249	224	10.2	1.0	7.2	32.0
1995	778	840	809	63	66	9	59	302	275	8.5	1.2	7.3	36.0
1996	840	944	892	104	117	14	64	354	328	13.9	1.7	7.2	37.4
1997	944	1,070	1,007	125	136	12	71	413	383	14.4	1.2	7.0	38.6
1998	1,070	1,253	1,161	183	196	11	81	484	448	18.3	1.0	7.0	38.6
1999	1,253	1,340	1,296	87	112	20	92	576	530	8.9	1.6	7.1	43.0
2000	1,340	1,425	1,383	86	143	57	96	628	602	10.7	4.3	6.9	44.1
Avg.										12.5	1.8	7.1	

## Verizon - Virginia Digital Circuit Rates

(Dollars in Millions)

_			ns Plant in Se	rvice				EOY	AVG.	Add	Retire	Deprec	Reserve
	BOY	EOY	Average	Increase	<u>Add</u>	Ret	<u>Deprec</u>	Reserve	Reserve	Rate	<u>Rate</u>	Rate	<u>Percent</u>
	(a)	(b)	(c)=(a+b)/2	(d) = b-a	(e)	(f)	(g)	(h)	(i)	(j) = e/a	(k) = f/a	(I) = g/c	(m) = h/b
1992	936	998	967	61	123	60	108	368	344	13.2	6.4	11.1	36.9
1993	998	1,065	1,031	67	134	66	109	410	389	13.5	6.6	10.6	38.5
1994	1,065	1,127	1,096	62	136	67	121	465	438	12.8	6.3	11.0	41.2
1995	1,127	1,223	1,175	96	137	45	129	551	508	12.1	4.0	11.0	45.1
1996	1,223	1,319	1,271	96	165	82	136	617	584	13.5	6.7	10.7	46.8
1997	1,319	1,446	1,383	127	153	44	147	740	678	11.6	3.4	10.6	51.2
1998	1,446	1,598	1,522	152	183	49	161	871	805	12.6	3.4	10.6	54.5
1999	1,598	1,780	1,689	182	209	38	174	1,020	945	13.1	2.4	10.3	57.3
2000	1,780	2,034	1,907	254	309	68	194	1,184	1,102	17.4	3.8	10.2	58.2
Avg.										13.3	4.8	10.7	

#### Verizon - Virginia Aerial Cable Rates

(Dollars in Millions)

		mmunicatio	ons Plant in Se	rvice				EOY	AVG.	Add	Retire	Deprec	Reserve
	BOY	EOY	Average	Increase	<u>Add</u>	Ret	Deprec	Reserve	Reserve	Rate	Rate	Rate	Percent
	(a)	(b)	(c)=(a+b)/2	(d) = b-a	(e)	( <b>f</b> )	(g)	(h)	(i)	(j) = e/a	(k) = f/a	(I) = g/c	(m) = h/b
1992	368	387	377	18	28	10	22	158	152	7.6	2.7	5.8	40.8
1993	387	401	394	15	21	4	23	178	168	5.5	1.0	5.8	44.2
1994	401	423	412	22	24	6	24	195	186	6.0	1.5	5.8	46.1
1995	423	438	431	14	21	5	25	214	205	4.9	1.2	5.8	49.0
1996	438	454	446	16	23	7	26	233	224	5.2	1.5	5.8	51.3
1997	454	475	465	21	28	6	27	252	242	6.1	1.4	5.8	53.0
1998	475	499	487	24	30	8	28	271	262	6.3	1.6	5.8	54.4
1999	499	515	507	16	23	6	29	293	282	4.7	1.2	5.8	56.9
2000	515	531	523	16	24	6	30	316	304	4.6	1.3	5.8	59.4
Avg.										5.7	1.5	5.8	

#### Verizon - Virginia Underground Cable Rates

(Dollars in Millions)

_		mmunicatio	ns Plant in Se	rvice				EOY	AVG.	Add	Retire	Deprec	Reserve
	BOY	EOY	Average	Increase	Add	<u>Ret</u>	Deprec	Reserve	Reserve	Rate	Rate	Rate	Percent
	(a)	(b)	(c)=(a+b)/2	(d) = b-a	(e)	(f)	(g)	(h)	(i)	(j) = e/a	(k) = f/a	(I) = g/c	(m) = h/b
1992	361	333	347	(28)	25	53	14	91	109	6.9	14.6	4.0	27.4
1993	333	343	338	9	18	(24)	15	121	106	5.3	-7.3	4.4	35.4
1994	343	371	357	29	23	6	17	136	129	6.8	1.6	4.9	36.7
1995	371	382	377	11	15	4	19	152	144	4.0	1.1	4.9	39.7
1996	382	395	389	13	16	4	19	167	159	4.3	0.9	4.9	42.4
1997	395	407	401	12	15	3	20	183	175	3.9	0.8	4 9	45.1
1998	407	418	412	11	15	4	20	199	191	3.6	0.9	5.0	47.7
1999	418	428	423	10	15	4	21	215	207	3.5	1.1	5.0	50.3
2000	428	440	434	12	16	3	22	233	224	3.6	0.7	5.0	53.1
Avg.										4.7	1.6	4.8	

## Verizon - Virginia Buried Cable Rates

(Dollars in Millions)

	Teleco	mmunicatio	ons Plant in Se	rvice				EOY	AVG.	Add	Retire	Deprec	Reserve
	BOY (a)	EOY (b)	Average (c)=(a+b)/2	Increase (d) = b-a	Add (e)	Ret (f)	<u>Deprec</u> (g)	Reserve (h)	Reserve (i)	<u>Rate</u> (j) = e/a	<u>Rate</u> (k) = f/a	<u>Rate</u> (I) = g/c	Percent (m) = h/b
1992	055	000		95		10				_ ,			/
	855	880	867	25	44	19	47	337	323	5.1	2.2	5.4	38.4
1993	880	912	896	32	44	5	48	379	358	5.0	0.6	5.4	41.6
1994	912	957	935	45	46	9	50	423	401	5.0	1.0	5.4	44.2
1995	957	997	977	40	47	7	53	469	446	4.9	0.7	5.4	47.0
1996	997	1,046	1,021	49	57	8	55	515	492	5.7	0.8	5.4	49.3
1997	1,046	1,102	1,074	56	66	9	58	563	539	6.3	0.9	5.4	51.1
1998	1,102	1,177	1,140	75	86	12	61	612	588	7.8	1.1	5.4	52.0
1999	1,177	1,241	1,209	64	78	13	65	663	638	6.6	1.1	5.4	53.4
2000	1,241	1,308	1,275	67	80	10	69	721	692	6.4	8.0	5.4	55.1
Avg.										5.9	1.0	5.4	

## **Life Prescription Illustration**

	Assumption			Plant Ir	Service	)		EOY			
	Assumption	Year	BOY	ADD	RET	EOY	BOY	ACC	RET	EOY	Reserve %
			а	b	С	d=a+b-c	е	f	g	h=e+f-g	i=h/d
1.	Prescribed life correct	1	1,000	100	100	1,000	400	100	100	400	40.0%
	No Growth	2	1,000	100	100	1,000	400	100	100	400	40.0%
	Add 10%	3	1,000	100	100	1,000	400	100	100	400	40.0%
	Retire 10%	4	1,000	100	100	1,000	400	100	100	400	40.0%
	Rate 10%										
2.	Prescribed life correct	1	1,000	150	100	1,050	400	100	100	400	38.1%
	With Growth	2	1,050	158	105	1,103	400	105	105	400	36.3%
	Add 15%	3	1,103	165	110	1,158	400	110	110	400	34.6%
	Retire 10%	4	1,158	174	116	1,216	400	116	116	400	32.9%
	Rate 10%		'			,					
3.	Prescribed life too long	1	1,000	150	100	1,050	400	80	100	380	36.2%
	With Growth	2	1,050	158	105	1,103	380	84	105	359	32.6%
	Add 15%	3	1,103	165	110	1,158	359	88	110	337	29.1%
	Retire 10%	4	1,158	174	116	1,216	337	93	116	314	25.8%
	Rate 8%	·	.,			7,= 7,5					
4.	Prescribed life correct	1	1,000	150	50	1,100	400	100	50	450	40.9%
	With Growth and	2	1,100	165	55	1,210	450	110	55	505	41.7%
	"Delayed" Retirements	3	1,210	182	61	1,331	505	121	61	566	42.5%
	Add 15%	4	1,331	200	67	1,464	566	133	67	632	43.2%
	Retire 5%										
	Rate 10%										